

## ABOUT MORGAN ADVANCED MATERIALS



Morgan Advanced Materials is a global engineering company offering world-leading competencies in materials science, specialist manufacturing and applications engineering. We focus our resources on the delivery of products that help our customers to solve technically challenging problems, enabling them to address global trends such as energy demand, advances in healthcare and environmental sustainability.

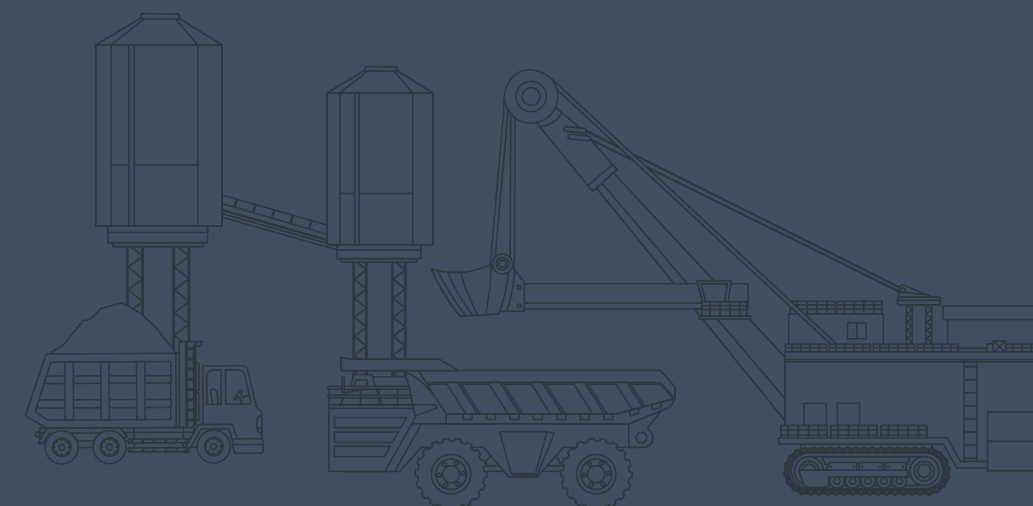
### What differentiates us?

- Advanced material science and processing capabilities.
- Extensive applications engineering experience
- A strong history of innovation and reinvention.
- Consistent and reliable performance.
- A truly global footprint.
- We find and invest in the best people.

### Contact email

[mining@morganplc.com](mailto:mining@morganplc.com)

# Mining It All Starts from Here



Performance Carbon





With today's demanding production environment, machine availability and reduced running costs are important factors, which should be assessed when selecting products.

Morgan Advanced Materials is actively supporting or involved in the mining industry, with footprints worldwide, including but not limited to Australia, China, Mongolia, U.S.A., Canada, Brazil, Chile, Peru, Mexico, Europe and South Africa.

We can supply OEM preferred motor, generator, and synchronous motor brushes for your draglines, rope shovels, front end loaders and trucks.

## Product Portfolio for All Mining Applications

- Carbon brushes for motors, generators, slip rings, grid blowers and alternators
- Self-rounding brushes
- Brush holders
- AEGIS™ shaft grounding rings

## Get High Performance Mining with Morgan

Morgan's products allow our customers to enjoy benefits such as increased uptime and reduced maintenance costs through improved machine reliability, optimal availability as well as the lowest Total Cost of Ownership possible.

Depending on the material and process technologies used, our specialist team of applications engineers will provide you with an optimum solution for each and every application.

Contact us now to get High Performance Mining today.

### Product Range Features

#### Excellent material performance

- Longer brushes
- More Usable carbon
- Reduced bar burning
- Unique proprietary formulas
- Outstanding product compatibility
- Good commutation property
- OEM Approved grades & designs

### Benefits For Customers

- Robust overall solutions
- Excellent pre-sales and after-sales service
- Comprehensive technology and application support

### Advantages

#### Our mining carbon brush applications offer advantages such as:

- A history of more than 160 years in material research, development and production
- Diverse material options to suit various climatic and geographical application locations
- Robust manufacturing processes
- Advanced testing equipment & leading inspection instruments
- Professional technology team & global application support
- Comprehensive service support & fast response



# Carbon Brushes

Carbon brushes are an engineered consumable designed to provide maximum life, whilst maintaining the optimum commutator or slipping surface.

Morgan's material expertise when coupled with our practical application knowledge have allowed the development of carbon grades to suit all applications including:

- Underloaded applications
- Overcooled applications
- High temperature applications
- Low humidity or totally enclosed applications

With the ability to manufacture carbon brushes for each and every application both locally and globally to meet your specific requirements, Morgan's carbon brush applications are proven, approved performers that deliver results.



Morgan's motor and generator brushes are the #1 Choice for large mining draglines and excavators. They are special because their special impregnation enabled:

- Long brush life
- Excellent commutator filming
- Reduced maintenance costs

Our carbon brush for electric rope shovels is proven materials that provide:

- Excellent commutation
- Long brush life
- Trouble-free operation
- Specially treated for film forming during periods of variable operating conditions

Morgan carbon brushes are the industry standard for large mining truck wheel motors, grid blower motors and alternators.



The specialist knowledge possessed by our team of applications engineers enables them to confidently recommend the most appropriate material grade to meet the demands of any given application which is a vital factor in achieving maximum brush life and peak motor performance.

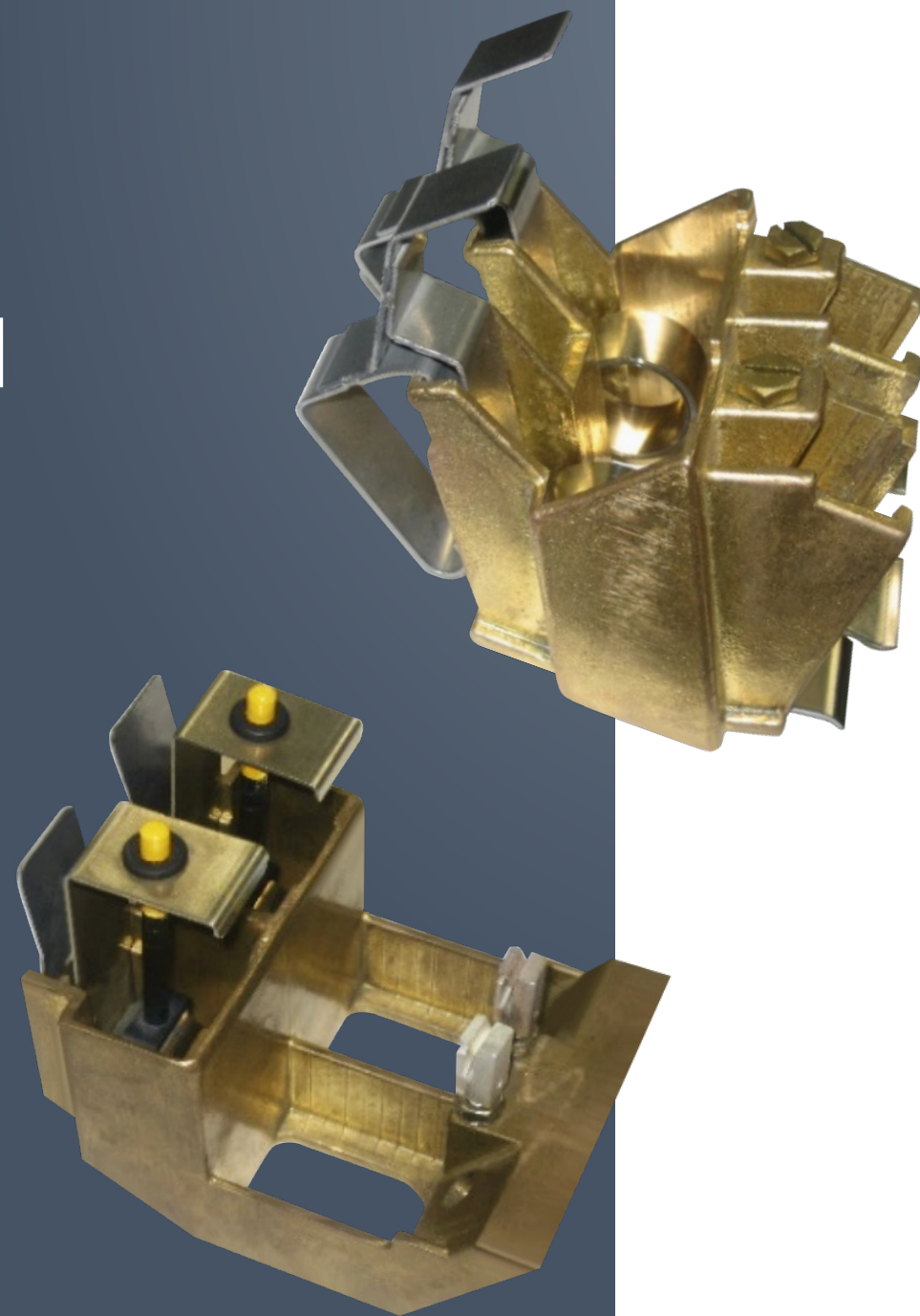
[For carbon brush grade selection and more technical information,](#)

[please contact mining@morganplc.com](mailto:mining@morganplc.com)



## Brush Holders to suit multi-brand machines

Specific fixed plant applications across processing, preparation and load out facilities can be tailored to suit your projects carbon brush & brush holder maintenance needs including repair, re-design and upgrades to slip ring assemblies for various designs of equipment an applications.



## AEGIS™ Shaft Grounding Rings Bearing Current Protection

AEGIS™ Bearing Protection Rings protect motor bearings for life. Variable Frequency drives (VFD) induced electrical voltages onto the shafts of AC and DC motors. With AEGIS® SGR Bearing Protection Rings installed on your motor, you benefit from sustainability, system up-time, production improvement and higher reliability.

